

Deepmind [2]

白 AlphaGo Zero 黒 AlphaGo Master 白 AlphaGo Zero 白 [3] 黒
 白 AlphaGo Master 黒 16 白 AlphaGo Zero 黒 18 白
 AlphaGo Zero 白 14 黒 45

2) AlphaGo Zero local trap
AlphaGo Zero Alpha

AlphaGo Zero AlphaGo Master AlphaGo Master

Superhuman ○○○○○○○○○○○○○○○○○○○○Clock ○○○○○IBM S/360 ○○○○○○○○○○○○○○○○○
○○○○○○○○○○○AlphaGo Zero □superhuman□IBM S/360 □□superhuman○○○○○
AlphaGo Zero ○○○○○○○Nature Magazine ○○○○AlphaGo Zero paper ○○○○
superhuman ○○○

Alpha Deepmind team
Alpha
Alpha
Alpha

AlphaGo Zero superhuman [7]
superhuman
deep-learning reinforcement superhuman

AlphaGo Zero 与 AlphaGo Master 的
AlphaGo Master 与 superhuman 的
AlphaGo Master 与 60 个
AlphaGo Master 与 superhuman 的
AlphaGo Zero 与 superhuman 的 [8]

Alpha は Turing Machine の deep-learning 版である。Alpha は Deepmind の AlphaGo Zero と AlphaGo Master の両方とも AlphaGo Zero に置き換えられた。

leukotomy reinforcement peer review
Socratic method peer review
Socratic method peer review

AlphaGo reinforcement

□ □ □ □ □ □ □ □ □ □ □ □

Turing Machine
 Turing Machine local trap Universal approximation
 1

Socratic method Superhuman Superhuman


~~~~~

[2] 文章 Cracking Go 介绍了 Deep Blue 和 AlphaGo 的棋局，以及 Alpha 的棋局。

[4] AlphaGo Zero vs AlphaGo Master 60+3

AlphaGo Master

Crazy Stone AlphaGo  
 Alpha

Alpha Go defeated the world champion Go player Lee Sedol in 2017. Google's AlphaGo Zero defeated AlphaGo in 2017. AlphaGo Zero defeated Human level artificial intelligence in 2017. Alpha Go defeated the world champion Go player Lee Sedol in 2017.

[6] superhuman Alpha [6]

[7] <http://www.alphago-games.com/> Full Strength of AlphaGo Zero, i.e. Final Form 40 Blocks 20 Blocks Not Full Strength of AlphaGo Zero

AlphaGo Zero 超human 超human

[8]

[9] 2012 "Show, don't tell" show Socratic method tell and discuss

Ideas are cheap

[10] "Go gaming is strictly defined within a very small space. Industrial automations are typically designed in well controlled environments, but not strictly defined. Car driving is regulated, but the environment is not well controlled"

[11]

Alpha

[12] AlphaGo Master AlphaGo AlphaGo Alpha



[13] Dialogue Concerning the Two Chief Word Systems Socratic Method

AlphaGo

[14] Alpha

Alpha  
BRAIN Initiative project

[illegible]

[15] Leukotomy  BRAIN Initiative project  **BRIAN Initiative**

[16] [https://www.alpha-robotics.com/](#) Alpha Robotics